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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,562	10/30/2003	Michael J. Neumann	10030590-1	1116

7590 06/12/2006

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EXAMINER	
NGUYEN, TUYEN T	

ART UNIT	PAPER NUMBER
2832	

DATE MAILED: 06/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/698,562	NEUMANN ET AL.	
	Examiner	Art Unit	
	TUYEN T. NGUYEN	2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *30 March 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *4,5,12,16 and 17* is/are allowed.

6)☒ Claim(s) *1,3,7-11,14 and 15* is/are rejected.

7)☒ Claim(s) *6 and 13* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3, 7-11 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hopfer [US 3,812,438] in view of Brickford et al. [US 6,084,485].

Hopfer discloses an inductor [figure 2] comprising:

- a coil form [58] having a conical portion with a tip;

- an integrated contact [58] disposed on the tip of the coil form; and

- an inductor coil [62] wound around the coil form and electrically coupled to the integrated contact.

Hopfer discloses the instant claimed invention except for the specific material of the coil form.

Brickford et al. discloses an inductor [figures 1A-1B] comprising:

- a poly-iron conical coil form [16A]; and

- a conductor tip [12/13] at the end of the coninal coil form.

It would have been obvious to one having ordinary skilled in the art at the time the invention was made to use poly-iron for the coil form of Hopfer, as suggested by Brickford et al., for the purpose of controlling the magnetic flux.

Regarding claim 3, Hopfer discloses the integrated contact comprises a plated tip portion of the coil form.

Regarding claim 10, Hopfer inherently discloses the integrated contact has a radius not greater than 250 microns. The specific hemispherical radius of the integrated contact would have been an obvious design consideration for the purpose of increasing contact area.

Regarding claims 7 and 11, it would have been obvious to solder the end of the inductor coil to the integrated contact for the purpose of providing strength to the electrical connection. The specific plating method for the contact would have been an obvious design consideration for the purpose providing connection for the coil.

Regarding claims 8 and 14, Hopfer inherently discloses the inductor coil wound not more than one turn around the plated portion of the coil form.

Response to Arguments

Applicant's arguments filed 3/30/2006 have been fully considered but they are not persuasive.

Applicant argues that:

[1] There is no reason to combine Bickford with Hopfer; poly-iron cone 16A would not be considered as a coil form.

[2] Hopfer do not discloses a plated tip portion.

The examiner disagrees.

Regarding [1], In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in

the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both Hopfer and Bickford teach the use of the device in microwave environment. A skilled artisan would have been motivated to use poly-iron cone as a coil form for the device of Hopfer for the purpose of controlling the magnetic flux. The coil form providing the support for the coil/winding. In this case, the poly-iron cone supporting the conductors [12, 13], therefore the poly-iron cone could have been use as a coil form.

Regarding [2], Hopfer discloses a conductive tip portion on the coil form. The specific plating would have been an obvious design consideration.

Allowable Subject Matter

Claims 4-5, 12 and 16-17 are allowed.

Claims 6 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TUYEN T. NGUYEN whose telephone number is 571-272-1996. The examiner can normally be reached on M-F 8:30-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ELVIN ENAD can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTN TTN

Tuyen Nguyen